

# Work Order ID 102050

May-23-13 7:44:06 AM

\*102050\*

Page 1

Item ID: D3183-042

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket Assembly

Start Date: 5/23/13

Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 5/31/13

Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals:

Process Plan: W

Date: 13-05-23 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3183	Rev C1								
100		0.00							
*100*	BAND SAW								
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks: (1.500" x 2.000") 4.300" long								
110		0.00							
*110*	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine D3183-2 as per Folio FA320 and Dwg D3183Identify as D3183-22-Deburr3-Scribe batch number								
120		0.00							
*120*	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									

shp 30/05

40

4

13-5-25

on 13/05/27

4

0

on 13/05/27

4

0

# Work Order ID 102050

May-23-13 7:44:06 AM

**\*102050\***

Page 2

Item ID: D3183-042 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Bracket Assembly  
 Start Date: 5/23/13 Start Qty: 2.00 **\*2\*** Cust Item ID:  
 Required Date: 5/31/13 Req'd Qty: 2.00 **\*2\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 <b>*130*</b> QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00		PO	13/05/28	4	0		
140 <b>*140*</b> Small Fab Small Fab	Small Fab  Memo Assemble D3183-041 as per Dwg D3183.	0.00  0.00				4x			13/05/28
150 <b>*150*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00			13/05/28	(x4)			

**\*102050\***

May-23-13 7:44:06 AM

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 5/23/13      **Start Qty:** 2.00      **\*2\***

**Cust Item ID:**

**Required Date: 5/31/13      Req'd Qty: 2.00      \*?\***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

**Insp.  
Stamp**

Identify as per dwg & Stock Location: 57 23 0.00

0.00

**\*160\***

### Packaging

## Memo

0.00

## Packaging

170

QC21- Final Inspection - Work Order Release

0.00

**\*170\***

QC

## Memo

0.00

## Quality Control

4x

8  
B-5-28

MLJ 13-05-28

U130528

# Picklist Print

May-23-13 7:44:05 AM

Page 1

Work Order ID: 102050

Parent Item: D3183-042

Parent Item Name: Bracket Assembly

Start Date: 5/23/13

Required Date: 5/31/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:Pick:A04.02.18New issueKJ/DS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3121-21 Bolt		Manufactured	No			140	Each	71.0000	2	4		5/13/05/28	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST235		71							
				99292		41							
				99601		30							
D3183-045 Bearing Assembly		Manufactured	No			100	Each	33.0000	2	4		5/13/05/28	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		5							
				88587		5							
				ST235B		28							
				96471		27							
				97336		1							
M174B2.000X01.500 17-4 SS Bar 2.00 x 1.500		Purchased	No			140	f	7.5760	0.4583	0.9648421		5/13-5-25	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT049		7.576							
				113189		7.576							

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	102050
<b>Description:</b> Bracket		<b>Part Number:</b>	D3183-1
<b>Inspection Dwg:</b> D3183 <b>Rev:</b> C1		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article      ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
<del>0.400</del>	+/-0.010					
0.182	+/-0.010	.181	—		Vern	ML-06
0.070	+/-0.010	.071	—		"	
0.100	+/-0.010	.093	—		"	
R0.063	+/-0.010	R.063	—		R-G	
R0.189	+/-0.010	R.190	—		"	
3.881	+/-0.010	3.8825	—		Vern	ML-06
4.17	+/-0.030	4.173	—		"	
0.830	+/-0.010	.830	—		"	
0.500	+/-0.010	.500	—		"	
0.218	+/-0.010	.210	—		"	
1.030	+/-0.010	1.030	—		"	
1.90	+/-0.030	1.891	—		"	
1.012	+/-0.010	1.013	—		"	
0.786	+/-0.010	.782	—		"	
R0.19	+/-0.010	R.190	—		R-G	
Ø0.392	+0.002/-0.000	Ø.3935	—		Micro	ML-07
0.162	+/-0.010	.163			Vern	ML-06
2.799	+/-0.010	2.801	—		"	
2.075	+/-0.010	2.075	—		"	
0.162	+/-0.010	.162			"	
0.032	+/-0.010	.032	—		"	
0.381	+/-0.010	.380	—		"	
0.200	+/-0.010	.203	—		"	

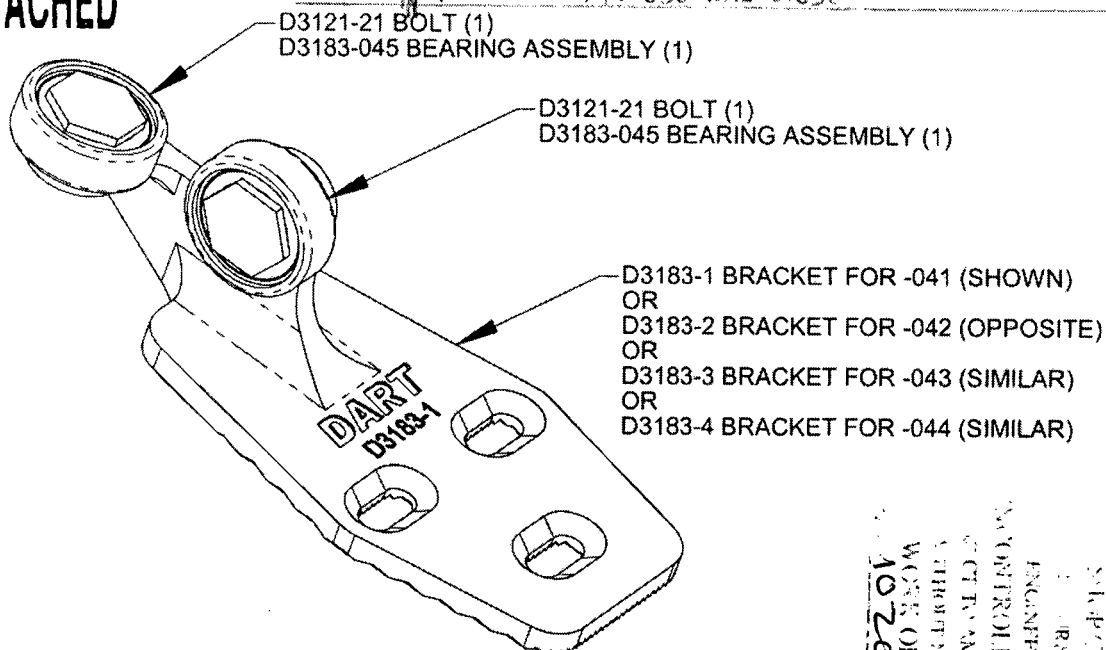
<b>Measured by:</b> <i>amf</i>	<b>Audited by:</b> <i>PD</i>	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 13/05/27	<b>Date:</b> 13/05/28	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	05.02.17	New Issue (P/O D3183-041/-042)	KJ/JLM <i>A</i>	<i>Paul</i>



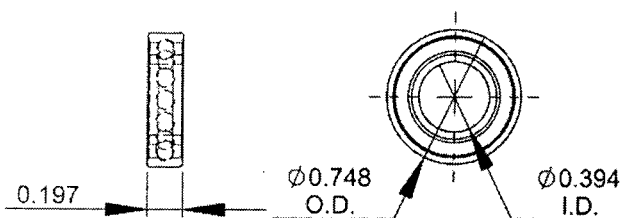
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CHECKED	APPROVED	DRAWING NO. <b>D3183</b>	REV. C SHEET 1 OF 4
DATE		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	04.11.09	0.830 WAS 0.850	

RELEASED  
04 03 01  
DEO ATTACHED



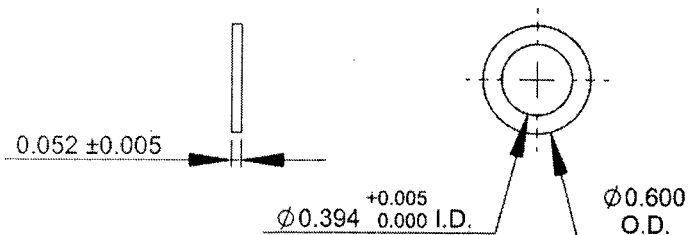
**D3183-041 BRACKET ASSEMBLY (SHOWN)**  
**D3183-042 BRACKET ASSEMBLY (OPPOSITE)**  
**D3183-043 BRACKET ASSEMBLY (SIMILAR)**  
**D3183-044 BRACKET ASSEMBLY (SIMILAR)**

13-05-23  
102050 MLS  
WORK ORDER  
DIRECT NOTICE  
CONTROLLED COPY  
ENGINEERING  
DESIGN  
COPY



**D3183-5 BEARING:**  
**SPECIFICATION CONTROL DRAWING**

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



**D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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# DART

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CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 2 OF 4
DATE		TITLE	SCALE
04.02.17		BRACKET ASSEMBLY	1:2

[illegible]

- 1) D3183-1 CAN BE MADE FROM D3183-3  
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643.  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS  
OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

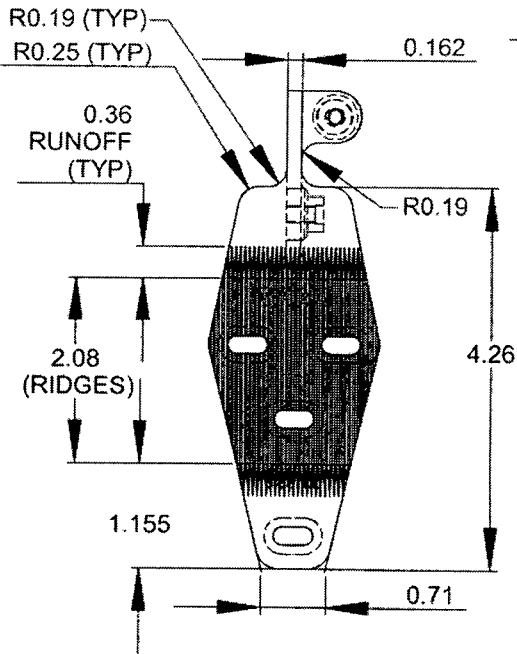
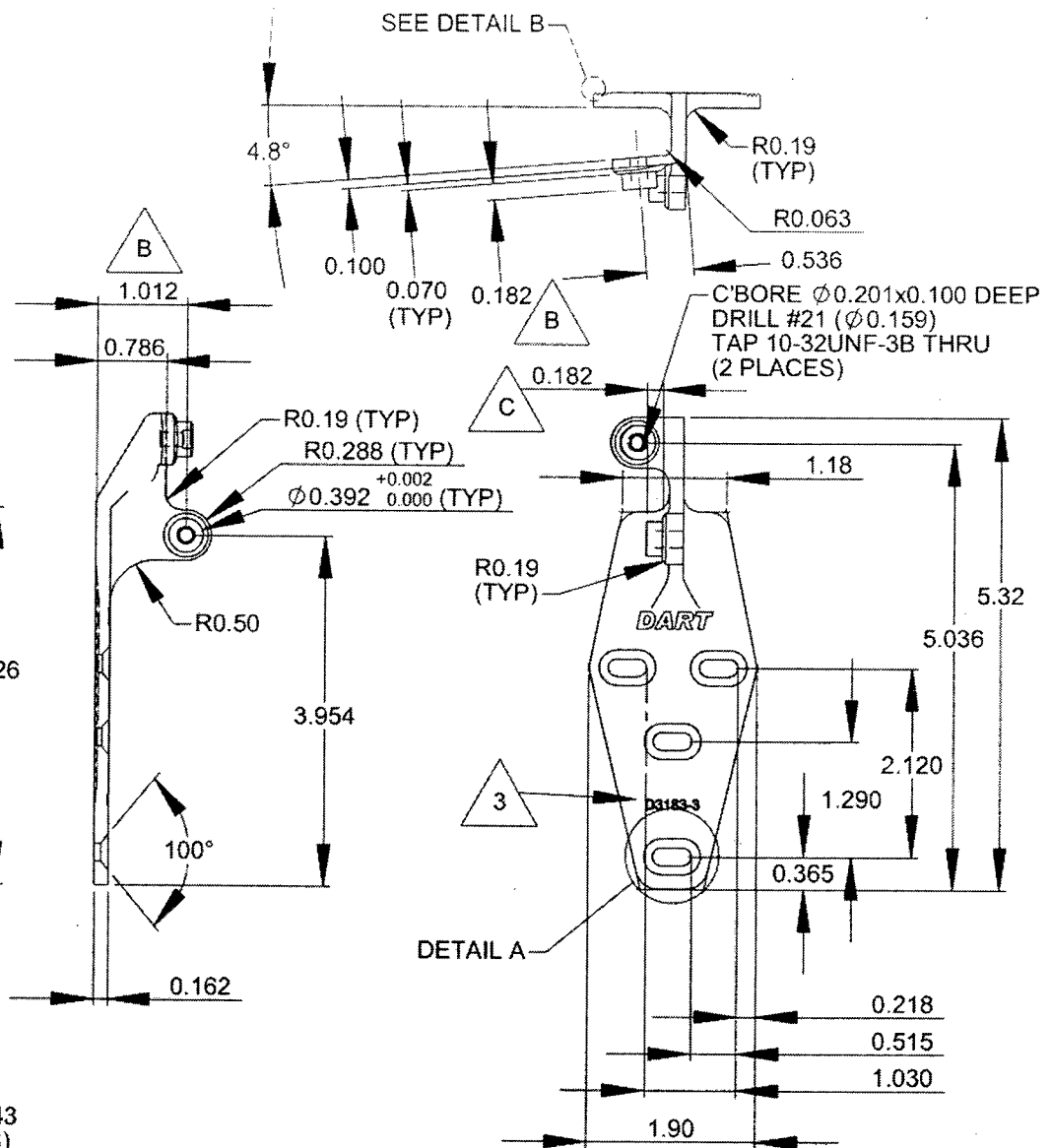
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DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 3 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2



**D3183-3 BRACKET SHOWN**  
(REPLACES BELL P/N 412-030-304-105)  
**D3183-4 BRACKET OPPOSITE**  
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

**DEO ATTACHED**

**RELEASED**

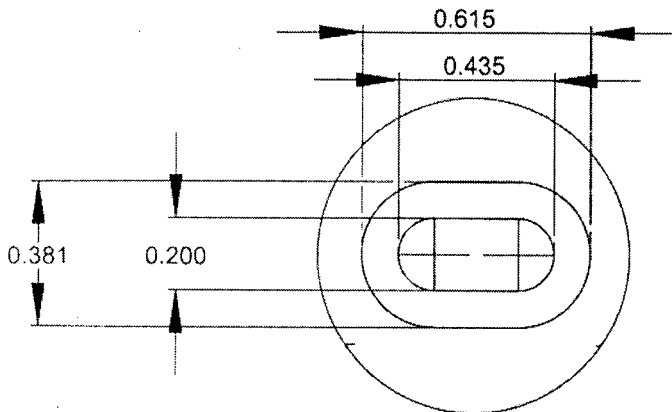
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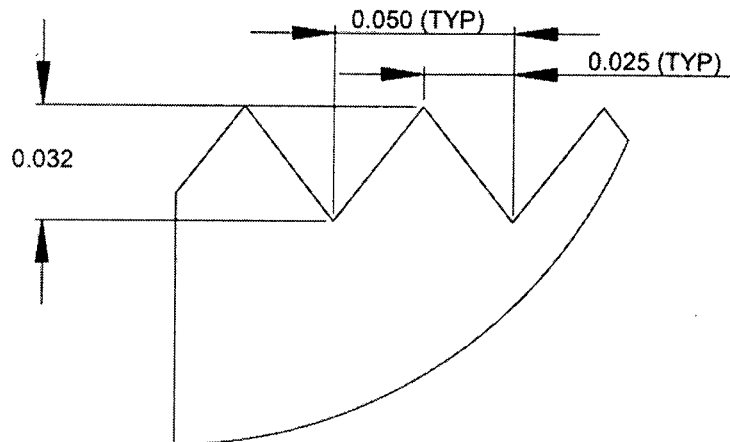
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3183</b>	REV. C SHEET 4 OF 4
DATE <b>04.02.17</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1



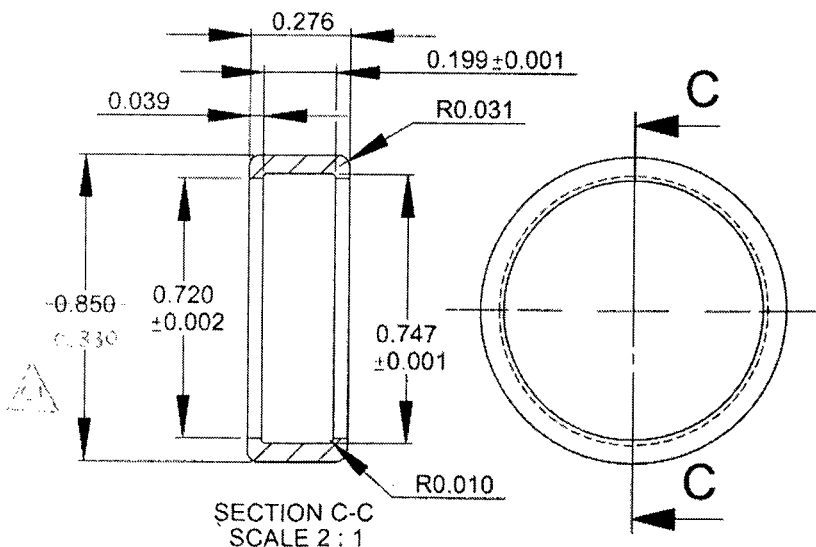
DETAIL A (2 : 1)

RELEASED  
04 03 01

DEO ATTACHED



DETAIL B (20 : 1)



**D3183-9 CAP**

- 1) MATERIAL: DELRIN ROD, Ø1.00  
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018  
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3183-045 BEARING ASSEMBLY**

- 1) ASSEMBLE D3183-5 BEARING AND  
D3183-9 CAP

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102050

102050

DRAWING NO. D3183	TITLE BRACKET ASSEMBLY	REV.C1	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3183-C1-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN qp	CHECKED [Signature]	MFG. APPR. [Signature]	APPROVED [Signature]	DE APPR. [Signature]			
DATE 10.05.14	DATE 10.06.30	DATE 10.06.30	DATE 10/06/30	DATE 10/06/30			

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]  
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

**RELEASED**  
2010-07-22  
[Signature]

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